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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Volker Kronseder

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EXAMINER

HARP, WILLIAM RAY

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,046	Applicant(s) KRONSEDER ET AL.	
	Examiner William R. Harp	Art Unit 3651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2009 and 21 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-13, 15, 18-29, 32-42 and 45-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21, 22, 35, 47, 48 and 53 is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-13, 15, 19, 20, 23-29, 33-42, 45, 46 and 49-51 is/are rejected.
- 7) ☒ Claim(s) 18, 32, 40, 52 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/8/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on October 8, 2009 has been entered.

2. The information disclosure statement (IDS) submitted on October 8, 2009 was filed after the mailing date of the Notice of Allowance on September 24, 2009. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner. The IDS is being considered as a result of the filing of an RCE.

3. Prosecution on the merits of this application is reopened on claims 1-9, 11-13, 15, 18-29, 32-42, 45-53 considered unpatentable for the reasons indicated below: newly discovered art to Francis (USPN 1810419). The art was presented in a search report cited in the IDS of October 8, 2009, which is currently being considered.

4. Applicant is advised that the Notice of Allowance mailed September 24, 2009 is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant

Art Unit: 3651

may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 4, and 6 23 28 36 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wipf (USPN 6591963) in view of EPO Document (EP 1295820 B1, hereafter '820) and Francis (USPN 1810419).

8. Regarding Claims 1,4, 6, 28, and 41, Wipf teaches a device for dynamic storage of objects comprising: an endless flexible conveying means (1), a conveying strand (10, 10'), and idle strand (11, 11'), each having areas of variable length [C3, L19-24], a carriage (2) having a first deflection (21) and a second deflection (21'), a first and second drive device (4, two shown in Figure 1) which are independently driven at variable speeds [C3, L10-24]. Wipf further

Art Unit: 3651

teaches an input station and an output stations [C2, L38-42]. Wipf teaches a link chain [C2, L35]. Wipf fails to teach grippers and further fails to teach a rotatable guide roller arranged movably on the chain links by a pivoted lever. '820 teaches grippers (20) used in a temporary storage device. The grippers engage the necks of the containers [C3, L41-43]. '820 further teaches that the grippers are fixed [C3, L40-43], which is considered to be rigidly mounted. It would have been obvious to use grippers in a storage device to grip the articles being conveyed as is known in the art to convey objects having neck portions. Francis teaches a link chain (5) with rotatable guide rollers (18) arranged movably on the chain links. The roller is connected by a pivoted lever (15) which can be detached from the chain link (by pin 14). It would have been obvious to use a chain link with pivotable guide rollers to guide the chain.

9. Regarding Claim 23 and 36, Wipf further teaches guide arcs (as illustrated in Figure 1) on the carriage. Wipf further teaches [C3, L44-48] that the conveying means is released from the carrier elements for simplified deflection. It would have been obvious to engage and disengage the roller chain from the guide rails to facilitate deflection of the roller chain.

10. Claims 2, 3, 5, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wipf in view of '820 and Francis as applied to claim 1 above, and further in view of Pickel et al. (USPN 6354427).

11. Regarding Claims 2, 3, 5, and 49, Wipf in view of '820 and Francis teaches the limitations described above, fails to teach the operation of the grippers. Pickel et al. teaches grippers (6) that are controllable [C3, L16-19] and clamps (24), which the examiner also considers to be grippers, which are passive [C4, L18-29]. Pickel et al. further teaches the bottle is held in a form fitting manner and also by frictional engagement [C3, L9-15], which the

Art Unit: 3651

examiner considers to be a positive lock and a friction lock. It would have been obvious to use passive or active grippers as a design consideration.

12. Claims 7-9 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wipf in view of '820 and Francis as applied to claim 1 above, and further in view of Santais et al. (USPN 5863571).

13. Regarding Claims 7-9 and 50, Wipf in view of '820 and Francis teaches the limitations described above. Wipf further teaches deflections (32) in the area of the input and output station, yet fails to teach movable grippers and structural units. Santais et al. teaches movable grippers (73, 74) that are combined to form a structural unit (72). Each structural unit is pivotable (around pivot pin 71) and, as illustrated in Figure 2, is pivoted through several positions. The structural units are arranged on extension arms (70). The structural units are pivotable to facilitate transfer of the objects [C7, L64-C8, L7]. It would have been obvious to arrange grippers in a pivotable structural unit to facilitate transportation of objects on the conveyor and transfer of objects to and from the conveyor. Further, it would have been obvious that the angular position of the structural units would be a design consideration with the level of ordinary skill.

14. Claims 11-13 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wipf in view of '820 and Francis as applied to claim 1 above, and further in view of Clopton (USPN 5076422).

15. Regarding Claims 10-13 and 51, Wipf teaches a link chain [C2, L35] and teaches a circular curve shape deflection in the area near the carriage. Wipf further teaches the conveyor frame (3) can be arranged vertically [C3, L4-7], yet fails to teach guide rollers and at least one

Art Unit: 3651

guide rail. Francis teaches guide rollers (18) and guide rails (1). Clopton teaches a link chain with guide rollers (20, 22, 24, and 26) and parallel guide rails (62, 62A). It would have been obvious to use a link chain with guide rollers and guide rails to guide a chain.

16. Claims 15, 19, 20, 24, 29, 33, 34, 37, 42, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wipf in view of '820 and Francis as applied to claims 1 and 28 above, and further in view of Leemkuil (USPN 5191959).

17. Regarding Claims 15, 19, 20, 29, 33, 34, 42, 45, and 46, Wipf in view of '820 and Francis teaches the limitations described above, yet fails to teach a movable guide roller impinged by a spring element, a guide roller mounted by means of a bolt, or a guide roller coupled to a thrust block. Leemkuil teaches a movable guide roller (35) with a thrust block (37), which rides against a stationary guide rail (94). This arrangement allows the guide roller to move parallel to its rotation axis, while allowing the element (15) from being displaced vertically. Leemkuil teaches that the roller is mounted on the lower end of a shaft (22) [C3, L15-17]. It is well known that a bolt is used to secure elements together and therefore, could have been used to mount the roller to the shaft. It would have been obvious to use a moveable guide roller coupled to a thrust block and impinged by a spring element to allow for lateral motion of the conveyor chain.

18. Regarding Claims 24 and 37, Wipf in view of '820 and Francis teaches the limitations described above, yet fails to teach a slanted ramp. Leemkuil teaches a slanted ramp (94) working in cooperation with the thrust block (37). It would have been obvious to use a slanted ramp to facilitate deflection of the thrust block.

Art Unit: 3651

19. Claims 14, 16, 28, 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wipf in view of '820 and Francis and Clopton as applied to claim 10 above, and further in view of Zurcher (US Pub 2002/0053499 A1).

20. Regarding Claims 14, 16, 28, and 30, Wipf in view of '820 and Francis and Clopton teaches the limitations described above, yet fails to teach a moveable guide roller connected by a pivotable lever. Zurcher teaches a movable guide roller (15) that is connected by a pivotable lever (210). It would have been obvious to use a pivotable lever along with a moveable guide roller to maintain contact between the roller and the guide rail.

21. Claims 25 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wipf in view of '820 and Francis as applied to claims 23 and 36 above, and further in view of Steeber et al. (USPN 6230874).

22. Regarding Claims 25 and 38, Wipf in view of '820 and Francis teaches the limitations described above. Wipf further teaches the deflections (21, 21') are arranged on a common frame (20), yet fails to teach pivoting and track rollers. Steeber et al. teaches a frame (30). The components of the frame are pivotally mounted to provide relative movement between the components as the frame moves through curves defined by the conveyors [C2, L47-64]. Steeber et al. further teaches bearing members (90) that ride in guide channels [C7, L34-36]. It would have been obvious to arrange the deflections in a pivotable manner on a frame along with rollers to facilitate deflection of the objects when the carriage moves through curved sections.

23. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wipf in view of '820 and Francis and Clopton as applied to claim 10 above, and further in view of Barth et al. (USPN 6394260).

Art Unit: 3651

24. Regarding Claim 27, Wipf in view of '820 and Francis and Clopton teaches the limitations described above yet fails to teach guide rails or parallel round rods. Barth et al. teaches guide rails (28, 30) that are parallel round rods (Figure 5). It would have been obvious to use parallel round rods as guide rails to facilitate transport of the objects through horizontal and vertical curves.

25. Claims 26 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wipf in view of '820 and Francis as applied to claims 1 and 28 above, and further in view of Fellner et al. (USPN 4513858).

26. Regarding Claim 39, Wipf in view of '820 and Francis teaches the limitations described above, yet fails to teach a tension element. Fellner et al. teaches an accumulator conveyor system. Fellner et al. further teaches a tensioning element (91T). Fellner et al. further teaches that it is important to prevent slack in the conveying means to ensure that the drive power is transmitted effectively [C5, L46-51]. It would have been obvious to use a tension element to ensure that the drive power is transmitted effectively.

Allowable Subject Matter

27. Claims 21, 22, 35, 47, 53, and 48 are allowed. Reasons for allowance can be found in the action of June 8, 2009.

28. Claims 18, 32, 40 and 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 3651

29. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach a control device to reset the pivoted lever, combined with the rest of the claim language.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William R. Harp whose telephone number is (571) 270-5386. The examiner can normally be reached on Monday - Thursday, 8:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Crawford can be reached on (571) 272-6911. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gene Crawford/
Supervisory Patent Examiner, Art Unit
3651

/W. R. H./
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30.

Application/Control Number: 10/588,046

Page 10

Art Unit: 3651